Standardizing State and Local Permitting Processes

Goal 2.3: Standardizing state and local permitting processes in Alabama to make CHP installation easier for industries.

Why Would This Be Helpful?

- It would make CHP installation easier for industries.
  - A standardized permitting process incorporating all jurisdictional levels (state, county, local, etc.) is one of several tools that states can adopt to increase the amount of cost-effective customer or utility owned CHP or other distributed generation (DG) in their state.
- A number of states have developed streamlined procedures and established timelines for interconnection approval for systems below certain capacity levels (e.g. 2MW or smaller)
  - New York, Texas, and Delaware among others.
- ADEM issues state air quality permits and has a very focused, streamlined process,
- However, local permitting requirements can be varied and unclear.
  - Standardized permitting rules establish clear and uniform processes and technical requirements for connecting CHP systems to the electric utility grid.

An Overview of Permitting

- Obtaining the required utility interconnection, environmental compliance, and construction permits is an essential step in the CHP project development process.
- Permit conditions often affect project design, and neither construction nor operation may begin until all permits are in process or in place.
- The process of permitting a CHP system will typically take from 3 to 12 months to complete, depending on the location, technology, and site characteristics.

Key Permitting Requirements

CHP projects must comply with:

- Local ordinances (e.g., noise, set-backs, general planning and zoning, land use, and aesthetics).
- Standards and codes (e.g., fire safety, piping, electrical, and structural).
- Air emissions requirements (e.g., NO_x, CO, SO_2 and particulate standards).

Key government agencies and other entities would be

- the city or county planning agency,
- the fire marshal at the respective fire department/authority,
- the city or county building department,
- the environmental health department,
- the air district district,
- and the local distribution utility.

Typical Approvals Required

Local utility company approvals;

- Electric utility interconnection study and approval
- Natural gas connection/supply Local jurisdiction pre-construction and construction approvals
- Planning department land use and environmental assessment/review
- Building department review and approval of project design and engineering (based on construction drawings)
- Air quality agency approval for construction

Local jurisdiction post-construction and operating approvals;

- Planning department and building department confirmation and inspection of installed CHP source
- Air quality agency confirmation that CHP emissions meet emissions requirements

Local Zoning/Planning Requirements

CHP sites are governed by a number of local jurisdictions which include:

- County and city ***planning bureaus***
  - govern land use and zoning issues. They may conduct environmental impact assessments, including noise studies, and are responsible for compliance with local ordinances
- State and local ***building and fire code departments***
  - address CHP-related safety issues such as exhaust temperatures, venting, natural gas pressure, fuel storage, space limitations, vibration, gas and steam piping, and building structural issues. Building departments are often part of a city's planning division.
- The ***environmental/public health department***
  - looks out for public health and safety, focusing on hazardous materials and waste management requirements.
- ***Water/sewer and public works authorities***
  - rule on water supply and discharge matters. Typically, they ensure that a project is compliant with the federal Clean Water Act; decide whether local water and wastewater quality standards will be or are being met.

Interconnection Requirements

- These include the technical and contractual requirements for interconnection to the local electricity grid for those systems that will operate in parallel with the utility.
  - "Parallel with the utility" means the CHP system is electrically interconnected with the utility distribution system at a point of common coupling at the site (common bus bar), and facility loads are met with a combination of grid and self-generated power.
- Interconnection requires various levels of equipment safeguards and utility approvals to ensure that power does not feed into the grid during grid outages.

Requirements for Interconnection

- While standardization of the technical and contractual requirements for parallel grid interconnection is not yet nationwide, the approval process typically includes the following steps:
  - *Application*
  - *Interconnection studies*
  - *Interconnection agreement*
  - *Power purchase agreement – sell excess power*
- States that are streamlining the interconnection process have targeted a time period of 4 to 6 weeks for review and completion of a simple interconnection application.

Permitting Costs

- Siting and permitting can require significant investments of time and money in researching, planning, filing applications, meeting with officials, and paying fees.
- Interconnection, environmental regulatory, and local government agency approval costs may approach 3 to 5 percent of project costs for smaller systems and need to be included in any CHP project economic evaluation.
- Equipment needed to ensure compliance, such as air pollution control equipment or noise abatement equipment, would be in addition to these fees.